

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (Canceled)
5. (Canceled)
6. (Canceled)
7. (Canceled)
8. (Canceled)
9. (Canceled)
10. (Canceled)
11. (Canceled)
12. (Canceled)
13. (Canceled)

14. (Currently Amended) A distillation method for recovering acetic acid from water during the production of terephthalic acid, the method comprising;

providing an input feed stream of water containing acetic acid;

separating, in an azeotropic dehydration column having an overhead section, a bottom stream having a higher acetic acid concentration than the input feed stream from an overhead vapor stream having a more dilute acetic acid concentration than the input feed stream, the azeotropic dehydration column operating at greater than ambient pressure; and

condensing the vapor stream to generate low pressure steam at a pressure level from 0.7-2.0 kilograms/cm²; and

wherein the overhead section has an overhead pressure of at least 1.2 kg/cm² abs.

15. (Previously Presented) The distillation method according to claim 14 further comprising entraining the vapor stream using N-butyl acetate.

16. (Previously Presented) The distillation method according to claim 14 further comprising entraining the vapor stream using I-butyl acetate.

17. (Previously Presented) The distillation method according to claim 14 further comprising entraining the vapor stream using a mixture of N-butyl acetate and I-butyl acetate.

18. (Canceled)

19. (Previously Presented) The distillation method according to claim 14 wherein the low pressure steam is greater than 0.7 kg/cm² but less than or equal to 2.0 kg/cm².

20. (Canceled)

21. (Canceled)

22. (Previously Presented) The distillation method according to claim 14 wherein the overhead section has an overhead pressure of greater than 1.2 kg/cm² abs.

23. (Previously Presented) The distillation method of Claim 14, and further comprising using the low pressure steam for power generation.

24. (Previously Presented) The distillation method of Claim 14, and further comprising directing the low pressure steam to a power generator.